ABSTRACT

The invention is to provide a simple and compact configuration which can still be improved in the efficiency of light condensation to a predetermined small-diametric area.

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The present invention is a device comprising: an arc tube 20 having a pair of main electrodes 21 and 22; and a reflector 30 for reflecting the outgoing light emitted from the arc tube 20, the electrode axis 01 of the main electrodes 21 and 22 being arranged to cross the light axis LA of the outgoing light. The reflector 30 is formed of a first reflector portion 31 having a spherical surface centered at the light generation point LO of the arc tube 20 and a second reflector portion 32 having a curved surface different from the first reflector portion 31, and a condenser 40 that condenses the outgoing light emitted from the arc tube 20 to other than the second reflector portion 32 and illuminates the condensed light in a predetermined direction or to a predetermined area is provided.